No. 734,407. PATENTED JULY 21, 1903.

L. W. DOWNES.

CIRCUIT TERMINAL FOR FUSES.

APPLICATION FILED MAR. 21, 1903.

NO MODEL.

Fig. 1.

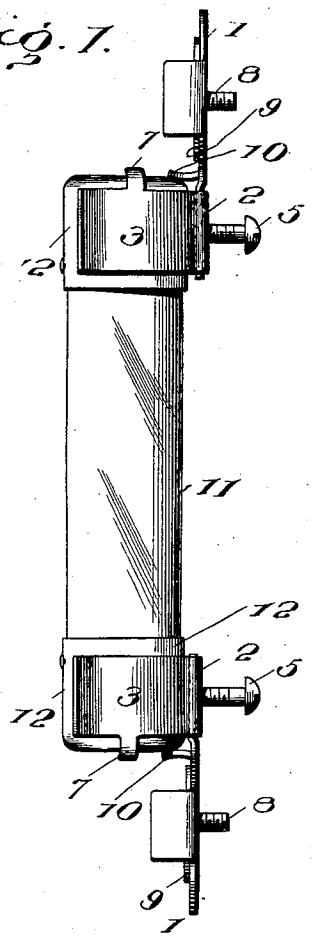


Fig. 2.

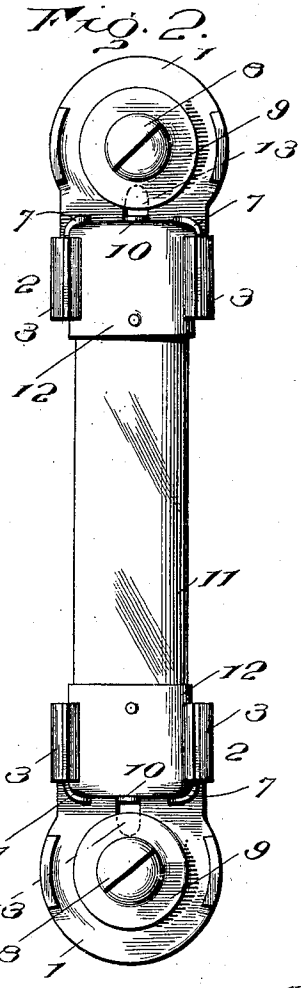


Fig. 4.

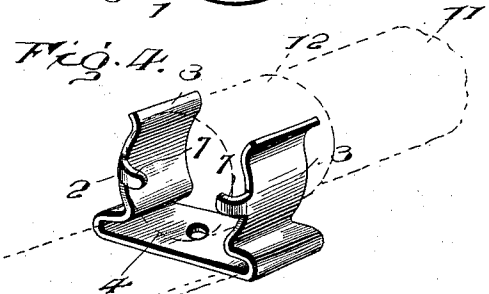
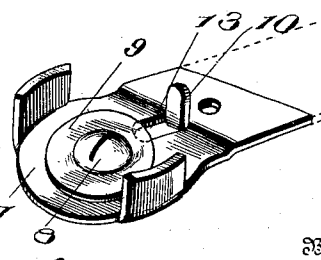


Fig. 3.



Witnesses

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 734,407. Patented July 21, 1903.

UNITED STATES PATENT OFFICE.

LOUIS W. DOWNES, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO THE D. & W. FUSE COMPANY, OF PROVIDENCE, RHODE ISLAND, A CORPORATION OF RHODE ISLAND.

CIRCUIT-TERMINAL FOR FUSES.

SPECIFICATION forming part of Letters Patent No. 734,407, dated July 21, 1903.

Application filed March 21, 1903. Serial No. 148,979. (No model.)

To all whom it may concern:

Be it known that I, LOUIS W. DOWNES, a resident of Providence, Rhode Island, have invented a new and useful Improvement in Circuit-Terminals for Fuses, which invention is fully set forth in the following specification.

My invention relates to improvements in circuit-terminals in which electric fuses are removably mounted, and particularly to those having two arms bearing against opposite sides of the metallic caps at the ends of the fuse.

My object is to provide means for preventing longitudinal or endwise movements of the fuse in the terminals, at the same time assuring accurate relative positioning and proper electrical contact between the parts. A further object is to provide such means with little, if any, addition to the ordinary cost of the terminals.

The improvements constituting my invention will be more readily understood by reference to the accompanying drawings, showing one form in which it may be embodied.

Figure 1 is a side elevation. Fig. 2 is a front elevation, and Figs. 3 and 4 are detail views of parts of a terminal.

As shown in the drawings, the terminal comprises two principal parts—a conducting plate or bar 1 and a clip 2. The latter comprises two spring-arms 3 3, connected at their lower ends by a cross-piece 4, against the inner face of which one end of the conducting plate or bar 1 bears. A screw 5, adapted to pass through and secure the terminal to a suitable base, such as a porcelain block, (not shown,) passes through an opening in the cross-piece 4 and engages a screw-threaded opening in plate 1, clamping the parts firmly together. The clip is preferably made by bending a strip of metal into the form shown in Fig. 4; but I do not limit myself in this respect, as the arms may be formed in any suitable way. At one edge each arm is provided with an inwardly-projecting lug, ear, or finger 7, constituting a stop to prevent longitudinal or endwise movement of the fuse in one direction. Preferably these lugs are intregal with the arms, this being the most economical way of making them; but I do not limit myself either as to the manner of formation or the location of these lugs so long as they perform the intended function of limiting or preventing movement of the fuse in the terminal. Furthermore, only one arm 3 may be provided with a lug 7.

A circuit-wire or similar connection is adapted to be held in electrical contact with plate 1 by a screw 8 and washer 9. A lug, ear, or projection 10, struck out of the metal of plate 1, leaving an opening 13, also serves to limit the movement and determine the position of the fuse in the terminal. Lug 10 may be used either alone or in conjunction with one or more lugs 7. For general use, however, I prefer to simply use one or more of the lugs 7.

The fuse 11 (shown in the drawings) is of the now well-known inclosed type having metallic caps 12 12 at opposite ends, against which the arms of the clips bear in completing the circuit through the fuse.

What I claim is—

1. In a circuit-terminal for electric fuses, a conductor plate or bar, a clip comprising two arms between which one end of a fuse is adapted to engage, an inwardly-projecting lug on one arm of the clip and a projecting lug struck out of the metal of the plate or bar, said lugs acting to limit or prevent longitudinal or endwise movement of the fuse in the terminal.

2. In a circuit-terminal for electric fuses, a clip comprising two arms between which one end of a fuse is adapted to engage, and an inwardly-projecting lug on one arm for limiting or preventing longitudinal or endwise movement of the fuse in the terminal.

3. In a circuit-terminal for electric fuses, a

clip comprising two spring-arms between which one end of a fuse is adapted to engage, and an inwardly-projecting lug on one arm for limiting or preventing longitudinal or endwise movement of the fuse in the terminal.

4. In a circuit-terminal for electric fuses, a clip comprising two spring-arms between which one end of a fuse is adapted to engage, an inwardly-projecting lug on each arm for limiting or preventing longitudinal or endwise movement of the fuse in the terminal.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

LOUIS W. DOWNES.

Witnesses:
JAMES H. THURSTON,
JOSEPH A. PHILLIPS.